

## Center for Advanced Materials and Microelectronics

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**Established as a center in 1988.** This center provides unique testing facilities, technical expertise and problem solving assistance to Utah industry. Composite, ceramic and semiconductor materials are currently being explored for structural, aerospace and electronic applications.

<u>Overview</u>	<u>Technologies</u>	<u>Status</u>	<u>Economic Impact</u>
Current State Contract . . . . . \$150,000	*Multiple layer epitaxy	*Focus on III/V compounds, composites & ceramics estb. Advanced material for infrared detection in 8-12 micron range designed & disclosed to patent office	*Option on infrared detection chip license taken by Space Eng. Inc., Logan, Utah
FY92 Matching Funds . . . . . \$939,734	*III/V compound chip design	*Center heavily involved helping move a branch of IBM, Philips or Hewlett Packard to Utah	*Center heavily involved helping move a branch of IBM, Philips or Hewlett Packard to Utah
FY92 Cumulative . . . . . \$4,340,778			
Total Jobs Created . . . . . 54	*Ceramics as solid electrolytes and structural components	*Leading edge research in bismuth oxide fuel cells	*Ceramatec, Beta Power Inc. and Edo Western are successful small high tech ceramics firms
Industry . . . . . 45			
Center . . . . . 9	*Composite materials	*Close collaboration with local composites manufacturers	
Direct Center Spin-offs . . . . . 0			
Total Benefiting Utah Companies . . . . . 9	*Organometallic vapor phase epitaxy	*Image analysis system for failure diagnosis available for use by local industry	*Commercial sales of the Tripos "Sybil" stimulation program (\$24,000) include Hercules BASF and B.F. Goodrich
License Agreements . . . . . 0	*Polymer property prediction models	*Unique combined thermogravimetry/mass spectrometry facilities available	*\$100K grant from Exxon Chemicals for polymer modeling work
Patents Applied . . . . . 3			
Patents Issued . . . . . 1			